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Gln Glu Leu Arg Leu Pro Ser Val Val Ile Pro Leu His Tyr Asp Leu 65 70 75 80

Phe Val His Pro Asn Leu Thr Ser Leu Asp Phe Val Ala Ser Glu Lys 85 90 95

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Lys Asp Leu Glu Ile Thr Asn Ala Thr Leu Gln Ser Glu Glu Asp Ser 115 120 125

Arg Tyr Met Lys Pro Gly Lys Glu Leu Lys Val Leu Ser Tyr Pro Ala 130 135 140

His Glu Gln Ile Ala Leu Leu Val Pro Glu Lys Leu Thr Pro His Leu 145 150 155 160

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| Lys 305 | Leu | Leu | Asp | Phe | Tyr 310 | Glu | Lys | Tyr | Phe | Asp 315 | Ile | Tyr | Tyr | Pro | Leu 320 |
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| | His 370 | | | | | 375 | _ | | _ | | 380 | | | | |
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| | | | | tat Tyr | | | | | | | | | | | | 412 |
| | | | | tct Ser | | | | | | | | | | | | 460 |
| cag Gln | ttt Phe | atc Ile | atc Ile | ttg Leu 110 | cac His | agc Ser | aaa Lys | gat Asp | ctt Leu 115 | gaa Glu | atc Ile | acg Thr | aat Asn | gcc Ala 120 | acc Thr | 508 |
| ctt Leu | cag Gln | tca Ser | gag Glu 125 | gaa Glu | gat Asp | tca Ser | aga Arg | tac Tyr 130 | atg Met | aaa Lys | cca Pro | gga Gly | aaa Lys 135 | gaa Glu | ctg Leu | 556 |
| aaa Lys | gtt Val | ttg Leu 140 | agt Ser | tac Tyr | cct Pro | gct Ala | cat His 145 | gaa Glu | caa Gln | att Ile | gca Ala | ctg Leu 150 | ctg Leu | gtt Val | cca Pro | 604 |
| gag Glu | aaa Lys 155 | ctt Leu | acg Thr | cct Pro | cac His | ctg Leu 160 | aaa Lys | tac Tyr | tat Tyr | gtg Val | gct Ala 165 | atg Met | gac Asp | ttc Phe | caa Gln | 652 |
| gcc Ala 170 | aag Lys | tta Leu | ggt Gly | gat Asp | ggc Gly 175 | ttt Phe | gaa Glu | ggg Gly | ttt Phe | tat Tyr 180 | aaa Lys | agc Ser | aca Thr | tac Tyr | aga Arg 185 | 700 |
| | | | | gaa Glu 190 | | | | | | | | | | | | 748 |
| acc Thr | cag Gln | gca Ala | cgc Arg 205 | atg Met | gct Ala | ttc Phe | cct Pro | tgc Cys 210 | ttt Phe | gat Asp | gaa Glu | ccg Pro | ttg Leu 215 | ttc Phe | aaa Lys | 796 |
| gcc Ala | aac Asn | ttt Phe 220 | tca Ser | atc Ile | aag Lys | ata Ile | cga Arg 225 | aga Arg | gag Glu | agc Ser | agg Arg | cat His 230 | att Ile | gca Ala | cta Leu | 844 |
| tcc Ser | aac Asn 235 | atg Met | cca Pro | aag Lys | gtt Val | aag Lys 240 | aca Thr | att Ile | gaa Glu | ctt Leu | gaa Glu 245 | gga Gly | ggt Gly | ctt Leu | ttg Leu | 892 |
| gaa Glu 250 | gat Asp | cac His | ttt Phe | gaa Glu | act Thr 255 | act Thr | gta Val | aaa Lys | atg Met | agt Ser 260 | aca Thr | tac Tyr | ctt Leu | gta Val | gcc Ala 265 | 940 |
| tac Tyr | ata Ile | gtt Val | tgt Cys | gat Asp | ttc Phe | cac His | tct Ser | ctg Leu | agt Ser | ggc Gly | ttc Phe | act Thr | tca Ser | tca Ser | Gly 999 | 988 |

270 275 280

| gtc Val | aag Lys | gtg Val | tcc Ser 285 | atc Ile | tat Tyr | gca Ala | tcc Ser | cca Pro 290 | gac Asp | aaa Lys | cgg Arg | aat Asn | caa Gln 295 | aca Thr | cat His | 1036 |
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| ttt Phe | gat Asp 315 | atc Ile | tac Tyr | tat Tyr | cca Pro | ctc Leu 320 | tcc Ser | aaa Lys | ctg Leu | gat Asp | tta Leu 325 | att Ile | gct Ala | att Ile | cct Pro | 1132 |
| gac Asp 330 | ttt Phe | gca Ala | cct Pro | gga Gly | gcc Ala 335 | atg Met | gaa Glu | aat Asn | tgg Trp | ggc Gly 340 | ctc Leu | att Ile | aca Thr | tat Tyr | agg Arg 345 | 1180 |
| gag Glu | acg Thr | tca Ser | ctg Leu | ctt Leu 350 | ttt Phe | gac Asp | ccc Pro | aag Lys | acc Thr 355 | tct Ser | tct Ser | gct Ala | tcc Ser | gat Asp 360 | aaa Lys | 1228 |
| ctg Leu | tgg Trp | gtc Val | acc Thr 365 | aga Arg | gtc Val | ata Ile | gcc Ala | cat His 370 | gaa Glu | ctg Leu | gcg Ala | cac His | cag Gln 375 | tgg Trp | ttt Phe | 1276 |
| ggc | aac Asn | ctg Leu 380 | gtc Val | aca Thr | atg Met | gaa Glu | tgg Trp 385 | tgg Trp | aat Asn | gat Asp | att Ile | tgg Trp 390 | ctt Leu | aag Lys | gag Glu | 1324 |
| ggt Gly | ttt Phe 395 | gca Ala | aaa Lys | tac Tyr | atg Met | gaa Glu 400 | ctt Leu | atc Ile | gct Ala | gtt Val | aat Asn 405 | gct Ala | aca Thr | tat Tyr | cca Pro | 1372 |
| gag Glu 410 | ctg Leu | caa Gln | ttt Phe | gat Asp | gac Asp 415 | tat Tyr | ttt Phe | ttg Leu | aat Asn | gtg Val 420 | tgt Cys | ttt Phe | gaa Glu | gta Val | att Ile 425 | 1420 |
| aca Thr | aaa Lys | gat Asp | tca Ser | ttg Leu 430 | aat Asn | tca Ser | tcc Ser | cgc Arg | cct Pro 435 | atc Ile | tcc Ser | aaa Lys | cca Pro | gcg Ala 440 | gaa Glu | 1468 |
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| ttc Phe | cag Gln 475 | aaa Lys | gga Gly | ata Ile | att Ile | cag Gln 480 | tac Tyr | tta Leu | aag Lys | aag Lys | ttc Phe 485 | agc Ser | tat Tyr | aga Arg | aat Asn | 1612 |
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| caa Gln | gac Asp 555 | Gly 999 | tgt Cys | tca Ser | ctc Leu | cga Arg 560 | ctg Leu | caa Gln | cag Gln | gag Glu | cgc Arg 565 | ttc Phe | ctc Leu | cag Gln | gly aaa | 1852 |
| gtt Val 570 | ttc Phe | cag Gln | gaa Glu | gac Asp | cct Pro 575 | gaa Glu | tgg Trp | agg Arg | gcc Ala | ctg Leu 580 | cag Gln | gag Glu | agg Arg | tac Tyr | ctg Leu 585 | 1900 |
| tgg Trp | cat His | atc Ile | cca Pro | ttg Leu 590 | acc Thr | tac Tyr | tcc Ser | acg Thr | agt Ser 595 | tct Ser | tct Ser | aat Asn | gtg Val | atc Ile 600 | cac His | 1948 |
| aga Arg | cac His | att Ile | cta Leu 605 | aaa Lys | tca Ser | aag Lys | aca Thr | gat Asp 610 | act Thr | ctg Leu | gat Asp | cta Leu | cct Pro 615 | gaa Glu | aag Lys | 1996 |
| acc Thr | agt Ser | tgg Trp 620 | gtg Val | aaa Lys | ttt Phe | aat Asn | gtg Val 625 | gac Asp | tca Ser | aat Asn | ggt Gly | tac Tyr 630 | tac Tyr | atc Ile | gtt Val | 2044 |
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| aac Asn | cat His | gct Ala | cct Pro 765 | tgc Cys | atc Ile | cag Gln | aaa Lys | gct Ala 770 | gct Ala | gaa Glu | ctc Leu | ttc Phe | tcc Ser 775 | cag Gln | tgg Trp | 2476 |
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| gag Glu | g gct 1 Ala | caa Glr | gga Gly 925 | ser Ser | cat His | ctg Lev | gat LAsp | att 11e 930 | Phe | caa Glr | act Thr | gtt Val | cto Leu 935 | ı Glu | acg Thr | 2956 |
| ata Ile | a acc | aaa Lys 940 | s Asr | ata 1 Ile | aaa Lys | tgg Trp | g ctg Lev 945 | ı Glu | g aag 1 Lys | g aat s Asr | ctt Lei | ccg Pro 950 | Thr | cto Lei | g agg ı Arg | 3004 |
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